CA. 788.16 STIX. SQUEL 8/20/06, 791

(FILE 'HOME' ENTERED AT 21:04:21 ON 20 AUG 2006)

FILE 'REGISTRY' ENTERED AT 21:04:29 ON 20 AUG 2006

See savech files on 8 TN. all "A"'s Ext 500 rched

```
SCREEN 2067
L1
L2
                STRUCTURE UPLOADED
L3
                QUE L2 AND L1
             11 S L3 FULL
L4
     FILE 'CAPLUS' ENTERED AT 21:06:47 ON 20 AUG 2006
                S 143132-43-8/REG#
     FILE 'REGISTRY' ENTERED AT 21:06:56 ON 20 AUG 2006
L5
              1 S 143132-43-8/RN
     FILE 'CAPLUS' ENTERED AT 21:06:57 ON 20 AUG 2006
L6
              1 S L5
    FILE 'REGISTRY' ENTERED AT 21:07:30 ON 20 AUG 2006
L7
                SCREEN 2067
                STRUCTURE UPLOADED
L8
                QUE L8 AND L7
L9
L10
              0 S L9 FULL
                SCREEN 2067
L11
L12
                STRUCTURE UPLOADED
L13
                QUE L12 AND L11
              0 S L13 FULL
L14
L15
                SCREEN 2067
L16
                STRUCTURE UPLOADED
L17
                QUE L16 AND L15
L18
              1 S L17 FULL
L19
                SCREEN 2067
L20
                STRUCTURE UPLOADED
L21
                QUE L20 AND L19
L22
              0 S L21 FULL
L23
                SCREEN 2067
L24
                STRUCTURE UPLOADED
L25
                QUE L24 AND L23
L26
              0 S L25 FULL
L27
                SCREEN 2067
L28
                STRUCTURE UPLOADED
L29
                QUE L28 AND L27
L30
              0 S L29 FULL
L31
                SCREEN 2067
L32
                STRUCTURE UPLOADED
L33
                OUE L32 AND L31
L34
                SCREEN 2067
L35
                STRUCTURE UPLOADED
L36
                QUE L35 AND L34
L37
             0 S L33 FULL
L38
            123 S L36 FULL
L39
             33 S L38 AND 3/NC
     FILE 'CAPLUS' ENTERED AT 21:23:43 ON 20 AUG 2006
                S 136691-69-5/REG#
     FILE 'REGISTRY' ENTERED AT 21:23:57 ON 20 AUG 2006
L40
              1 S 136691-69-5/RN
     FILE 'CAPLUS' ENTERED AT 21:23:57 ON 20 AUG 2006
L41
              2 S L40
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FILE 'REGISTRY' ENTERED AT 21:24:09 ON 20 AUG 2006

S 226922-20-9/REG#

```
ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
L6
AN
     1992:512725 CAPLUS
DN
     117:112725
ΤI
     Bibenzoxazole unit-containing polyethers
IN
     Matsuo, Shigeru; Kayano, Chikafumi
PA
     Idemitsu Kosan K. K., Japan
SO
     Jpn. Kokai Tokkyo Koho, 10 pp.
     CODEN: JKXXAF
DT
     Patent
     Japanese
LΑ
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                         _ _ _ _
     JP 04089825
                          A2
                                19920324
                                            JP 1990-206067
PRAI JP 1990-206067
                                19900803
     Polyethers are prepared from 2,2'-bis(4-halophenyl)bibenzoxoazoles,
     hydroquinone or 4,4'-biphenol, andin optionally comonomers such as
     2,6-dichlorobenzonitrile and 4,4'-dichlorodiphenyl sulfone. Thus,
     2,2'-bis(4-fluorophenyl)-5,5'-bibenzoxazole-4,4'-biphenol copolymer was
     prepared, with thermal decomposition beginning temperature 577° in air.
IT
     143132-43-8P
     RL: PEP (Physical, engineering or chemical process); PREP (Preparation);
     PROC (Process)
        (manufacture of heat-resistant)
RN
     143132-43-8 CAPLUS
CN
     Methanone, bis(4-chlorophenyl)-, polymer with [1,1'-biphenyl]-4,4'-diol
     and 2,2'-bis(4-fluorophenyl)-5,5'-bibenzoxazole (9CI) (CA INDEX NAME)
     CM
     CRN 127472-29-1
```

19900803

CM

F

HO

CRN 92-88-6 CMF C12 H10 O2

CMF C26 H14 F2 N2 O2

CM 3

CRN 90-98-2 CMF C13 H8 Cl2 O

=> d 12

L2 HAS NO ANSWERS

L2 STR

G1 Cl,F

G2 H, Me, CH2, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, Ph, o-C6H4, m-C6H4, p-C6H4

Structure attributes must be viewed using STN Express query preparation.

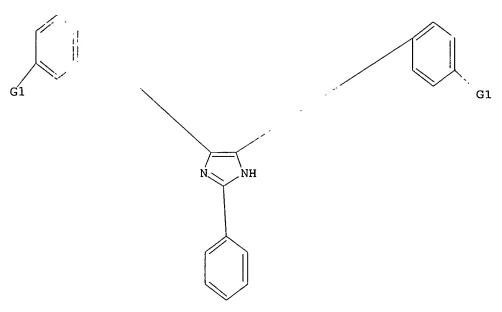
=> d 18 L8 HAS NO ANSWERS L8 STR

G1 Cl,F

G2 H, Me, CH2, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, Ph, o-C6H4, m-C6H4, p-C6H4

Structure attributes must be viewed using STN Express query preparation.

=> d 112 L12 HAS NO ANSWERS L12 STR



G1 Cl,F G2 H,Me,CH2,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph,o-C6H4,m-C6H4,p-C6H4

Structure attributes must be viewed using STN Express query preparation.

=> d his

(FILE 'HOME' ENTERED AT 21:04:21 ON 20 AUG 2006)

FILE 'REGISTRY' ENTERED AT 21:04:29 ON 20 AUG 2006

L1 SCREEN 2067

L2 STRUCTURE UPLOADED

L3 QUE L2 AND L1

L4 11 S L3 FULL

FILE 'CAPLUS' ENTERED AT 21:06:47 ON 20 AUG 2006 S 143132-43-8/REG#

FILE 'REGISTRY' ENTERED AT 21:06:56 ON 20 AUG 2006 L5 1 S 143132-43-8/RN

FILE 'CAPLUS' ENTERED AT 21:06:57 ON 20 AUG 2006 L6 1 S L5

FILE 'REGISTRY' ENTERED AT 21:07:30 ON 20 AUG 2006

L7 SCREEN 2067

L8 STRUCTURE UPLOADED

L9 QUE L8 AND L7

L10 0 S L9 FULL L11 SCREEN 2067

L12 STRUCTURE UPLOADED

L13 QUE L12 AND L11 L14 0 S L13 FULL

=> d 120 L20 HAS NO ANSWERS L20 STR

CN

CN

Structure attributes must be viewed using STN Express query preparation.

=> d 124 L24 HAS NO ANSWERS L24 STR

$$\begin{array}{c} 0 \\ N \end{array} \begin{array}{c} \\ \\ \\ \end{array} \begin{array}{c} \\ \\ \\ \end{array} \begin{array}{c} \\ \\ \end{array} \begin{array}{c} \\ \\$$

G1 Cl,F

G2 H, Me, CH2, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, Ph, o-C6H4, m-C6H4, p-C6H4

Structure attributes must be viewed using STN Express query preparation.

=> d 128 L28 HAS NO ANSWERS L28 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> d his

FILE 'REGISTRY' ENTERED AT 21:06:56 ON 20 AUG 2006 L5 1 S 143132-43-8/RN

FILE 'CAPLUS' ENTERED AT 21:06:57 ON 20 AUG 2006 L6 1 S L5

FILE 'REGISTRY' ENTERED AT 21:07:30 ON 20 AUG 2006 L7 SCREEN 2067 L8 STRUCTURE UPLOADED L9 QUE L8 AND L7 L10 0 S L9 FULL L11 SCREEN 2067 L12 STRUCTURE UPLOADED L13 QUE L12 AND L11 0 S L13 FULL L14 L15 SCREEN 2067 STRUCTURE UPLOADED

L16 L17 QUE L16 AND L15 L18 1 S L17 FULL L19 SCREEN 2067 L20 STRUCTURE UPLOADED L21 QUE L20 AND L19 L22 0 S L21 FULL L23 SCREEN 2067 L24 STRUCTURE UPLOADED

L25 QUE L24 AND L23
L26 0 S L25 FULL
L27 SCREEN 2067
L28 STRUCTURE UPLOADED
L29 QUE L28 AND L27
L30 0 S L29 FULL

```
ΑN
     2004:757063 CAPLUS
DN
     141:280351
TT
     Polymer electrolyte material, polymer electrolyte parts,
     membrane-electrode laminate, and polymer electrolyte fuel cell
     Adachi, Shinya; Izuhara, Daisuke; Nakamura, Masataka; Ito, Nobuaki
IN
PA
     Toray Industries, Inc., Japan
SO
     PCT Int. Appl., 147 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                         ----
                                -----
PΙ
     WO 2004079844
                          A1
                                20040916
                                           WO 2004-JP2894
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     JP 2004269599
                          A2
                                20040930
                                            JP 2003-59569
                                                                    20030306
     CA 2518414
                          AΑ
                                20040916
                                            CA 2004-2518414
                                                                    20040305
     EP 1619735
                          A1
                                20060125
                                            EP 2004-717850
                                                                    20040305
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
     CN 1757130
                          Α
                                20060405
                                            CN 2004-80006115
                                                                    20040305
     JP 2005174897
                          A2
                                20050630
                                            JP 2004-121470
                                                                    20040416
     US 2006180796
                          A1
                                20060817
                                            US 2005-548110
                                                                    20050906
PRAI JP 2003-59569
                          Α
                                20030306
     JP 2003-116685
                          Α
                                20030422
     JP 2003-120115
                          Α
                                20030424
     JP 2003-386734
                          Α
                                20031117
     JP 2003-386735
                          Α
                                20031117
     WO 2004-JP2894
                          W
                                20040305
AB
     The electrolyte material has a nonfreezing water fraction (Rw1) of 20-100
     in a hydrous state {Rw1 = [Wnf/(Wfc + Wnf)]; Wnf= amount of nonfreezing
     water per g of dry weight of polymer electrolyte material; and Wfc= amount of
     low m.p. water per g of dry weight of polymer electrolyte material \.
     parts, the laminate, and the fuel cell use the above material. The fuel
     cell, using the above material, has excellent proton-conductivity and fuel
cutoff
     properties and improved efficiency.
IT
     136691-69-5D, sulfonated
     RL: DEV (Device component use); USES (Uses)
        (fuel cells containing polymer electrolyte materials with controlled
        nonfreezing water fraction for improved efficiency)
RN
     136691-69-5 CAPLUS
CN
     Methanone, bis(4-fluorophenyl)-, polymer with 1,4-benzenediol and
     bis(4-fluorophenyl)phenylphosphine oxide (9CI) (CA INDEX NAME)
     CM
     CRN
         54300-32-2
     CMF
         C18 H13 F2 O P
```

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

L41

CM 2

CRN 345-92-6 CMF C13 H8 F2 O

CM 3

CRN 123-31-9 CMF C6 H6 O2

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
AN
     2004:757063 CAPLUS
DN
     141:280351
TI
     Polymer electrolyte material, polymer electrolyte parts,
     membrane-electrode laminate, and polymer electrolyte fuel cell
IN
     Adachi, Shinya; Izuhara, Daisuke; Nakamura, Masataka; Ito, Nobuaki
PA
     Toray Industries, Inc., Japan
SO
     PCT Int. Appl., 147 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ----
                                -----
                                            -----
     WO 2004079844
                         A1
                                20040916
                                            WO 2004-JP2894
PΤ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
            MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     JP 2004269599
                          A2
                                20040930
                                            JP 2003-59569
                                                                    20030306
     CA 2518414
                          AA
                                20040916
                                            CA 2004-2518414
                                                                    20040305
     EP 1619735
                          A1
                                20060125
                                            EP 2004-717850
                                                                    20040305
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
     CN 1757130
                                20060405
                                            CN 2004-80006115
                                                                   20040305
                          Α
     JP 2005174897
                          A2
                                20050630
                                            JP 2004-121470
                                                                   20040416
    US 2006180796
                         A1
                                20060817
                                            US 2005-548110
                                                                   20050906
PRAI JP 2003-59569
                                20030306
                         Α
     JP 2003-116685
                         Α
                                20030422
     JP 2003-120115
                         Α
                                20030424
     JP 2003-386734
                         Α
                                20031117
     JP 2003-386735
                          Α
                                20031117
     WO 2004-JP2894
                         W
                                20040305
AB
     The electrolyte material has a nonfreezing water fraction (Rw1) of 20-100
     in a hydrous state {Rw1 = [Wnf/(Wfc + Wnf)]; Wnf= amount of nonfreezing
     water per g of dry weight of polymer electrolyte material; and Wfc= amount of
     low m.p. water per g of dry weight of polymer electrolyte material \}.
     parts, the laminate, and the fuel cell use the above material. The fuel
     cell, using the above material, has excellent proton-conductivity and fuel
cutoff
    properties and improved efficiency.
ΙT
     136691-69-5D, sulfonated
     RL: DEV (Device component use); USES (Uses)
        (fuel cells containing polymer electrolyte materials with controlled
       nonfreezing water fraction for improved efficiency)
RN
     136691-69-5 CAPLUS
CN
    Methanone, bis(4-fluorophenyl)-, polymer with 1,4-benzenediol and
    bis (4-fluorophenyl) phenylphosphine oxide (9CI) (CA INDEX NAME)
     CM
     CRN
         54300-32-2
     CMF C18 H13 F2 O P
```

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

L41

CM 2

CRN 345-92-6 CMF C13 H8 F2 O

CM 3

CRN 123-31-9 CMF C6 H6 O2

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:584482 CAPLUS

DN 115:184482

TI Poly(arylene ether ketone)-poly(arylene ether phosphine oxide) copolymer and blend compositions

AU Smith, C. D.; Gungor, A.; Keister, K. M.; Marand, H. A.; McGrath, J. E.

CS Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061-0212, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1991), 32(1), 93-5
CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

AB Compatible blends of PEEK and poly(arylene ether phosphine oxide) (PEPO)
were prepared which gave clear amorphous films when quenched from the melt.
Random PEEK-PEPO copolymers were prepared via low-temperature polymerization

which showed glass temperature higher than PEEK.

IT 136691-69-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and thermal characteristics of)

RN 136691-69-5 CAPLUS

CN Methanone, bis(4-fluorophenyl)-, polymer with 1,4-benzenediol and bis(4-fluorophenyl)phenylphosphine oxide (9CI) (CA INDEX NAME)

CM 1

CRN 54300-32-2

CM 2

CRN 345-92-6 CMF C13 H8 F2 O

CM 3

CRN 123-31-9 CMF C6 H6 O2

= :